

**NOT TO BE PUBLISHED IN THE OFFICIAL REPORTS**

California Rules of Court, rule 8.1115(a), prohibits courts and parties from citing or relying on opinions not certified for publication or ordered published, except as specified by rule 8.1115(b). This opinion has not been certified for publication or ordered published for purposes of rule 8.1115.

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

DIVISION SEVEN

LINDA S. STRICKLAND et al.,

Plaintiffs and Respondents,

v.

UNION CARBIDE CORPORATION,

Defendant and Appellant.

B234459

(Los Angeles County  
Super. Ct. No. BC379088)

APPEAL from a judgment of the Superior Court of Los Angeles County,  
Charles F. Palmer, Judge. Affirmed.

Horvitz & Levy, David M. Axelrad, Daniel J. Gonzalez, Wesley T. Shih; Orrick,  
Herrington & Sutcliffe, Morton D. Dubin, Catherine Morris Krow and Thomas A.  
Harvey for Defendant and Appellant.

Paul & Hanley, Dean A. Hanley; Law Office of Ted W. Pelletier and Ted W.  
Pelletier for Plaintiffs and Respondents.

---

Glen Arthur Strickland, a construction worker for 45 years, died in 2007 from peritoneal mesothelioma. Union Carbide, the manufacturer of Calidria, a chrysotile asbestos product used in certain drywall joint compounds, appeals from the judgment after a jury verdict in favor of Strickland's widow, Linda Strickland, and their two children (the Strickland family) in this wrongful death action. Union Carbide contends the Strickland family failed to prove exposure to Calidria was a substantial factor contributing to Strickland's risk of developing peritoneal mesothelioma. We affirm.

## **FACTUAL AND PROCEDURAL BACKGROUND**

### *1. Summary of the Evidence Presented at Trial*

#### *a. Asbestos and mesothelioma generally*

There are several types of asbestos. During the time relevant to Strickland's claims chrysotile asbestos was the most common type used, including in insulation and fireproofing materials, stucco and gun cement, ceiling and wall texturing materials and drywall joint compound. Union Carbide mined and milled chrysotile, which it began marketing under the brand name Calidria in the late 1960's. Amphibole is another type of asbestos. It was often used in conjunction with chrysotile for higher-temperature, industrial applications. Much of the chrysotile that is mined is contaminated with amphibole fibers. Calidria, however, is pure chrysotile.

Mesothelioma is a rare cancer of the mesothelial cells that line several body cavities. It is caused primarily by asbestos exposure, developing 20 to 40 years after the exposure. About 90 percent of cases occur in the pleural (chest) cavity and about 10 percent in the peritoneal (abdominal) cavity. Peritoneal mesothelioma is associated with high concentrations of amphibole asbestos.

#### *b. Strickland's exposure to various products containing asbestos*

In the early 1960's Strickland began installing drywall, including hanging wallboard, applying and sanding drywall joint compound to mask the seams between the boards and cleaning up the dust from sanding the compound. From the late 1960's to 1977 Strickland personally used, and was present on jobsites where others used, drywall joint compound containing Calidria.

During his life Strickland was also likely exposed to amphibole and chrysotile asbestos on repeated occasions. For example, his father did some construction and insulation work at naval shipyards when Strickland was growing up. The insulation materials used on ships often contained amphibole asbestos. It is known that naval shipyard workers who returned home at the end of the day covered in dust containing amphibole asbestos fibers could contaminate family members. Strickland's own construction work included tearing out insulation and scrapping off fireproofing, creating inhalable dust with asbestos fibers. Additionally, in 1962 Strickland worked on the construction of a movie theater where a spray-on amphibole asbestos product (Limpet) was used that had a "very, very, very high" concentration of asbestos fibers per cubic centimeter.

Strickland was diagnosed with peritoneal mesothelioma in December 2006 and died within a year. A biopsy of Strickland's lung tissues showed a significant concentration of asbestos bodies indicating he had mostly likely been exposed to a very high concentration of amphibole asbestos.<sup>1</sup>

*c. Expert testimony regarding Strickland's exposure to chrysotile contributed to his risk of developing peritoneal mesothelioma*

Dr. Samuel Hammar, a pathologist with an extensive career studying asbestos-related disease, opined, "to a reasonable medical certainty," chrysotile causes peritoneal mesothelioma.<sup>2</sup> Although Hammar had believed through the late 1980's there was

---

<sup>1</sup> Asbestos bodies are asbestos fibers at least five micrometers long that become coated in iron and protein as the body attempts to make the fiber nontoxic.

<sup>2</sup> Dr. Hammar's testimony on this crucial point, although brief, was quite direct:

"Q. And do chrysotile fibers get to the peritoneum in humans?

"A. Yes.

[¶] . . . [¶]

"Q. You've formed some opinions in this case; is that fair to say?

"A. Sure.

insufficient evidence it did so, he changed his opinion based on his own research finding chrysotile in the abdominal cavity. Hammar explained, although it is “probably easier [for asbestos] to get to the pleura than it is to get to the abdominal cavity[,] . . . there are still well-defined mechanisms by which asbestos could get into your lungs and then travel through the lymphatic system into the abdominal cavity and, actually, be deposited there where peritoneal mesotheliomas occur,” including if a person exposed to asbestos were to cough and then swallow: “It would go down your intestinal tract. And it’s been shown experimentally in animals that asbestos fibers can penetrate through the wall of an intestine and get into the tissue and the abdominal cavity that way.”

Hammar acknowledged some of his colleagues continue to believe there is insufficient evidence chrysotile causes peritoneal mesothelioma and conceded “there still probably is relatively little evidence” it does, but maintained there is nevertheless evidence. Describing a study finding the most common group of workers who developed peritoneal mesothelioma were insulators exposed to a combination of amphibole and chrysotile, Hammar opined, “[T]here’s no inherent reason why you would think that if chrysotile can cause pleural mesothelioma, and we know that it gets into the abdominal cavity, why it would also not cause peritoneal mesothelioma. You’re talking about the same cells. You’re talking about the same type of carcinogens. You’re talking about the same mechanisms by which asbestos causes cancer.”<sup>3</sup> Hammar noted about 10 percent of

---

“Q. This idea that—I think you told us when you were with us on Monday, it’s your opinion that chrysotile causes peritoneal mesothelioma?

“A. Yes.

“Q. And do you hold that opinion to a reasonable medical certainty?

“A. Yes.”

Hammar was also asked, “[A]re there articles [in the medical literature] that support the idea specifically as to chrysotile causing peritoneal mesothelioma?” He answered, “Yes.”

<sup>3</sup> Dr. Hammar also conceded the medical community does not know why somebody would get peritoneal mesothelioma as opposed to pleural mesothelioma “because you’d think that as far as the asbestos goes into your lungs, that it would first encounter the

insulators die from mesothelioma, about half of those workers die from pleural mesothelioma and half from peritoneal mesothelioma, yet they are all exposed to a similar combination of amphibole and chrysotile asbestos. He also stated the professional literature consistently reports that people exposed to multiple kinds of asbestos have a high rate of peritoneal mesothelioma.

With respect to Calidria specifically Dr. Hammar was asked, “And do you have any reason to believe that the chrysotile that comes out of the mine that Union Carbide mined is different in some way from other people’s chrysotile?” Hammar responded, “The chrysotile itself I don’t think is different. I think what perhaps would be different in some situations would be is that the Calidria chrysotile doesn’t contain any tremolite or anthophyllite [that is, amphibole asbestos], as far as we can tell.” During cross-examination Hammar was asked, “And it’s true that you do not have any evidence you can rely on to say that exposure to Calidria asbestos causes mesothelioma in humans, correct?” He responded, “As a pure product, no, that’s correct.” He later explained, “what I meant is that I don’t know of any cases where the only exposure that a person has had is to Calidria type of chrysotile asbestos, but I know plenty of cases . . . where Calidria has been part of the make-up of the asbestos that the individuals . . . were exposed to.”

John Templin, an industrial hygienist who also testified as an expert witness on behalf of the Strickland family, opined the range of Strickland’s likely exposure to asbestos as a user of drywall joint compound (that is, mixing, sanding and cleaning up) or someone present in the same room as a user was significantly higher than ambient background levels. Templin explained one cubic meter of city air in the 1960’s to 1970’s contained about 50 asbestos fibers per cubic meter as compared to from 2 million to 40 million asbestos fibers in the area around drywall joint compound user’s or bystander’s head. Templin, who is not a medical doctor, further testified, “Each exposure

---

pleura before it would encounter the peritoneal cavity, but nevertheless there are cases of peritoneal mesothelioma.”

to asbestos results in an increasing body burden of the material and being a carcinogen, there isn't any known threshold or no effect level, if you will. So it's viewed in the scientific community as every exposure being cumulative and increasing the risks of developing disease."

Union Carbide did not present any expert testimony on the issue of causation.

## *2. Closing Argument; the Verdict*

The heart of Union Carbide's defense was that "[E]xposure to Union Carbide asbestos, if any, did not cause Mr. Strickland's peritoneal mesothelioma." Union Carbide argued the Strickland family's witnesses "vastly exaggerated" Strickland's exposure to drywall tape compound and changed their testimony to identify Union Carbide as the manufacturer of the drywall tape compound once the other asbestos-manufacturer defendants were no longer in the case. It also argued, even accepting Dr. Hammar's testimony chrysotile may cause mesothelioma in some circumstances, he failed to opine that Calidria, specifically, was a substantial factor causing Strickland's disease; and Strickland had ample exposure to amphibole, which is commonly associated with peritoneal mesothelioma, including when his father brought it home on his clothes, and while he worked on the construction project where Limpet, the worst asbestos product ever made, was used—an exposure Union Carbide accused the Strickland family witnesses of trying to downplay. Although the special verdict form submitted to the jury included multiple questions regarding the Strickland family's causes of action for negligence, design defect and failure to warn, counsel for Union Carbide told the jury to simply answer yes to the questions establishing negligence and product defect and focus only on causation.

The jury returned a verdict in favor of the Strickland family on each claim and awarded \$865,120.05 in economic damages and \$1.3 million in noneconomic damages. The jury allocated 46 percent fault to Union Carbide, 25 percent to Strickland and 29 percent to other persons or entities. The jury did not find Union Carbide was guilty of malice, oppression or fraud warranting imposition of punitive damages.

### *3. The Court's Denial of Union Carbide's Motion for Judgment Notwithstanding the Verdict; Entry of Judgment*

Union Carbide moved for judgment notwithstanding the verdict contending no reasonable juror could conclude exposure to Calidria was a substantial factor contributing to Strickland's risk of peritoneal mesothelioma based on Dr. Hammar's testimony. Union Carbide argued Hammar fatally conceded Calidria is different from other forms of chrysotile and he had no proof Calidria causes mesothelioma, thus his opinion it did was speculative. Union Carbide further argued, "According to Dr. Hammar, there is 'abundant proof' that amosite and crocidolite [that is, amphibole] causes peritoneal mesothelioma; even a single day of exposures to these forms of asbestos can be sufficient; and the asbestos bodies in Mr. Strickland's lungs prove that he was likely exposed to heavy doses of amphibole asbestos. The product responsible for Mr. Strickland's massive amphibole exposure (Limpet) is also known. Thus, Mr. Strickland's harm would have occurred absent any act by Union Carbide . . . ." With respect to Templin's testimony every asbestos exposure is cumulative and increases the risk of developing mesothelioma, Union Carbide argued counsel for the Strickland family had represented to the court Templin, who is not a doctor, was not being called to testify on the issue of causation.

The court denied Union Carbide's motion. On May 27, 2011 the court entered judgment against Union Carbide in the amount of \$598,000, reflecting credit for pre-verdict settlements and apportionment of fault.

## **DISCUSSION**

### *1. Standard of Review*

Union Carbide's appeal from the final judgment and from the order denying its motion for a judgment notwithstanding the verdict (see Code Civ. Proc., § 904.1, subd. (a)(4) [making such an order appealable]) both present the question whether any substantial evidence—contradicted or uncontradicted—supports the jury's conclusion. (*Sweatman v. Department of Veterans Affairs* (2001) 25 Cal.4th 62, 68; *Cabral v. Ralphs Grocery Co.* (2011) 51 Cal.4th 764, 770.) "A motion for judgment notwithstanding the

verdict may be granted only if it appears from the evidence, viewed in the light most favorable to the party securing the verdict, that there is no substantial evidence in support.” (*Sweatman*, at p. 68; see *Hansen v. Sunnyside Products, Inc.* (1997) 55 Cal.App.4th 1497, 1510 [“trial court’s discretion in granting a motion for judgment notwithstanding the verdict is severely limited”]). “The trial judge cannot reweigh the evidence [citation], or judge the credibility of witnesses. [Citation.] If the evidence is conflicting or if several reasonable inferences may be drawn, the motion for judgment notwithstanding the verdict should be denied.” (*Clemmer v. Hartford Insurance Co.* (1978) 22 Cal.3d 865, 877-878.) Even the uncorroborated testimony of a single witness may constitute substantial evidence. (*In re Marriage of Mix* (1975) 14 Cal.3d 604, 614.) If there is any substantial evidence, we must affirm the order denying the motion and the jury verdict. (*Sweatman*, at p. 68; *Hauter v. Zogarts* (1975) 14 Cal.3d 104, 110.)

## 2. Law Governing Proof of Causation in Asbestos Cases

*Rutherford v. Owens-Illinois, Inc.* (1997) 16 Cal.4th 953 (*Rutherford*) sets forth the controlling standard for proving causation in an asbestos-related personal injury case. “[T]he plaintiff must first establish some threshold *exposure* to the defendant’s defective asbestos-containing products, *and* must further establish in reasonable medical probability that a particular exposure or series of exposures was a ‘legal cause’ of his injury, i.e., a *substantial factor* in bringing about the injury. In an asbestos-related cancer case, the plaintiff need *not* prove that fibers from the defendant’s product were the ones, or among the ones, that actually began the process of malignant cellular growth. Instead, the plaintiff may meet the burden of proving that exposure to defendant’s product was a substantial factor causing the illness by showing that in reasonable medical probability it was a substantial factor contributing to the plaintiff’s or decedent’s *risk* of developing cancer.” (*Id.* at pp. 982-983, fn. omitted; see also *id.* at pp. 976-977 [plaintiff may prove causation “by demonstrating that the plaintiff’s exposure to defendant’s asbestos-containing product in reasonable medical probability was a substantial factor in contributing to the aggregate *dose* of asbestos the plaintiff or decedent inhaled or ingested, and hence to the *risk* of developing asbestos-related cancer,” fn. omitted].)



The *Rutherford* Court recognized that plaintiffs exposed to occupational asbestos have often been exposed to multiple products containing asbestos, raising the question “which exposures to asbestos-containing products contributed significantly enough to the total occupational dose to be considered ‘substantial factors’ in causing the disease.” (*Rutherford*, *supra*, 16 Cal.4th at p. 977.) Answering that question, the Court held, “The substantial factor standard is a relatively broad one, requiring only that the contribution of the individual cause be more than negligible or theoretical. A standard instruction [on concurring causes] tells juries that each of several actors or forces acting concurrently to cause an injury is a legal cause of the injury ‘regardless of the extent to which each contributes to the injury.’ A plaintiff who suffers from an asbestos-related cancer and has proven exposure to inhalable asbestos fibers from several products will not, generally speaking, face insuperable difficulties in convincing a jury that a particular one of these product exposures, or several of them, were substantial factors in creating the risk of asbestos disease or latent injury.” (*Id.* at p. 978; see *Jones v. John Crane, Inc.* (2005) 132 Cal.App.4th 990, 999 [“In *Rutherford*, the court recognized that ‘a force which plays only an “infinitesimal” or “theoretical” part in bringing about injury, damage, or loss is not a substantial factor,’ but warned that ‘[u]ndue emphasis should not be placed on the term “substantial.” For example, the substantial factor standard, formulated to aid plaintiffs as a broader rule of causality than the “but for” test, has been invoked by defendants whose conduct is clearly a “but for” cause of plaintiff’s injury but is nevertheless urged as an insubstantial contribution to the injury. [Citation.] Misused in this way, the substantial factor test “undermines the principles of comparative negligence, under which a party is responsible for his or her share of negligence and the harm caused thereby.”’” ].)

### 3. *Substantial Evidence Supports the Jury’s Verdict*

Focusing on the precise language of several of the questions asked Dr. Hammar and his responses to them, Union Carbide contends his opinion addressed only the consequence of Strickland’s total exposure to asbestos during his working career, leaving unresolved the significance of Calidria on his risk of developing peritoneal

mesothelioma. Union Carbide argues, “[B]ecause Union Carbide was only responsible for Strickland’s exposure to its own product, it was essential that Dr. Hammar say the *cumulative* exposure to *Calidria*, as distinct from all or any other types of asbestos, was a substantial factor contributing to Strickland’s risk of developing the rare cancer. Because Dr. Hammar never said that exposure *in and of itself* contributed substantially to Strickland’s risk of developing the disease, there was a failure of proof on the issue of medical causation.”<sup>4</sup>

Union Carbide’s argument misstates the plaintiff’s burden under *Rutherford*. As discussed, to create a jury question on the issue of causation in an asbestos-related cancer case, it is sufficient for the plaintiff to prove a threshold exposure to the defendant’s product and to present expert testimony there is a reasonable medical probability the defendant’s product can cause the type of cancer at issue and the plaintiff’s (or decedent’s) cumulative exposure to asbestos contributed to his or her disease. (*Rutherford, supra*, 16 Cal.4th at pp. 982-983.) It is then up to the jury to determine whether that testimony is persuasive and, if so, to what extent this defendant’s product, rather than the other asbestos-containing products to which the plaintiff (or decedent) was exposed, was a factor contributing to the disease. There need not be testimony specifically linking the defendant’s product in isolation to the plaintiff’s increased risk of developing cancer. (See *Hernandez v. Amcord, Inc.* (2013) 215 Cal.App.4th 659, 674-675 (*Hernandez*).)

In *Hernandez* our colleagues in Division Two of this court recently considered a similar question regarding the proof of substantial factor causation in a mesothelioma

---

<sup>4</sup> Although we agree with the Strickland family that Union Carbide’s argument on appeal presents a somewhat different challenge to the causation evidence from that presented in the trial court, this tactical shift is entirely permissible: Even if not raised below, challenges to the sufficiency of the evidence may be raised for the first time on appeal. (See *Tahoe National Bank v. Phillips* (1971) 4 Cal.3d 11, 23, fn. 17 [although arguments not presented to the trial court may ordinarily not be raised on appeal, “contention that a judgment is not supported by the substantial evidence, however, is an obvious exception to the rule”].)

case. Hernandez, a construction worker, was exposed to asbestos when he used Riverside gun plastic cement to apply stucco to houses from 1969 through the 1970's. At the wrongful death trial against the manufacturer of Riverside gun plastic cement, plaintiff presented the expert testimony of epidemiologist Richard Lemen, Ph.D., who opined, "[I]f a worker poured a 94-pound bag of Riverside gun plastic cement containing asbestos, the worker would be at increased risk for developing mesothelioma as long as the asbestos fibers were respirable and airborne [and,] if a worker were exposed to many different asbestos-containing products, each of those products would contribute to an increased risk of asbestos-related disease, as long as the asbestos was inhaled and retained in the worker's body." (*Hernandez, supra*, 215 Cal.App.4th at p. 666.) Dr. Richard Kradin, who reviewed Hernandez's medical records, work history and lung tissue, prepared a report that was read into evidence noting Hernandez had repeatedly been exposed to asbestos while working in construction from 1963 through the 1990's. Kradin opined "to a reasonable degree of medical probability" Hernandez's mesothelioma was caused by asbestos exposure. (*Ibid.*)

The trial court granted defendant's motion for nonsuit, finding plaintiff had failed to prove causation because neither expert opined that defendant's product specifically caused Hernandez's mesothelioma. (*Hernandez, supra*, 215 Cal.App.4th at p. 668.) The trial court "also expressed concern that Dr. Lemen used the words 'reasonable scientific certainty' and did not 'utter the words "reasonable degree of medical probability."'" (*Ibid.*) Division Two reversed, "We disagree with the trial court's view that *Rutherford* mandates that a medical doctor must expressly link together the evidence of substantial factor causation. The *Rutherford* court did not create a requirement that specific words must be recited by appellant's expert." (*Id.* at p. 675.)

The *Hernandez* court explained the evidence in the case before it was "nearly identical" to the evidence in *Rutherford*: "In *Rutherford*, the causation evidence included factual evidence of the decedent's exposure to respondent's product, expert testimony from an epidemiologist who opined as to the cause of mesothelioma generally, and expert medical testimony on the relationship between asbestos exposure and lung cancer.

Pursuant to *Rutherford*, such evidence is sufficient for a jury to determine the issue of causation.” (*Hernandez, supra*, 215 Cal.App.4th at pp. 675-676.)

Similarly, in the case at bar the Strickland family presented evidence Strickland was exposed to a significant amount of Calidria (although disputed at trial, it is not challenged on appeal) and expert testimony about the link between asbestos and mesothelioma generally, as well as studies finding chrysotile in the abdominal tissue, possible mechanisms as to how it would get there, and a hypothesis why chrysotile can, like amphibole, cause peritoneal mesothelioma. To be sure, Dr. Hammar did not specifically link Strickland’s exposure to Calidria to an increased risk of developing the disease, opining instead as to the cumulative impact of his exposure to asbestos.

“Q: In this particular case, you understand that Mr. Strickland did drywall work; is that right?

“A: Yes.

“Q: And in the course of doing that drywall work and other work that was related to the construction industry, he was exposed to asbestos; is that also your understanding?

“A: Yes.

“Q: And certainly one of the types of asbestos he was exposed to was chrysotile?

“A: Yes.

“Q: Do you have an opinion to a reasonable medical certainty as to whether those exposures that Mr. Strickland suffered as a result of doing drywall work and other work where he was exposed to asbestos, that those were a substantial factor that ultimately contributed to his risk of getting mesothelioma?

[¶] . . . [¶]

“A: I do.

“Q: What is that opinion?

“A: That they were.”

That testimony, coupled with Dr. Hammar's unequivocal opinion chrysotile causes peritoneal mesothelioma, was sufficient to permit the jury to find substantial factor causation: "Plaintiffs cannot be expected to prove the scientifically unknown details of carcinogenesis, or trace the unknowable path of a given asbestos fiber." (*Rutherford*, *supra*, 16 Cal.4th at p. 976.)

In sum, in light of the highly deferential standard of review requiring us to view the testimony in the Strickland family's favor, there was substantial evidence from which the jury could conclude Strickland's exposure to Calidria played more than a negligible or theoretical part in his risk of developing peritoneal mesothelioma. Even if we disregard Templin's more specific testimony on causation because it was expressly represented he was not called to opine on that subject, Dr. Hammar's testimony was sufficient. (See *In re Marriage of Mix*, *supra*, 14 Cal.3d at p. 614 [uncorroborated testimony of a single witness may constitute substantial evidence].) Union Carbide's arguments, in essence, simply challenge the proper weight to be given this scientific evidence.

### **DISPOSITION**

The judgment is affirmed. Linda Strickland and her children, Holly Strickland-Morgan and Robert Strickland, are to recover their costs on appeal.

PERLUSS, P. J.

We concur:

ZELON, J.

SEGAL, J.\*

---

\* Judge of the Los Angeles Superior Court, assigned by the Chief Justice pursuant to article VI, section 6 of the California Constitution.